

IN THE CLAIMS:

None of the claims have been amended herein. All of the pending claims 1, 2, 4 through 8, 10 through 14, 16 through 20, and 22 through 24 are presented below. This listing of claims will replace all prior versions and listings of claims in the application. Please enter these claims as previously amended.

Listing of Claims:

1. (Previously Presented) A semiconductor die, comprising:
a semiconductor substrate having a front side and a back side;
an integrated circuit on a portion of the front side;
a passivation layer covering a portion of the integrated circuit causing a stress on at least a portion of the semiconductor substrate; and
a stress-balancing layer covering at least a portion of the back side substantially balancing the stress caused by the passivation layer covering a portion of the integrated circuit, the stress-balancing layer comprising at least one of a metal, a metal alloy, a metallorganic material, a photoresist material, a multilayer material for balancing stresses in more than one direction, a tape material for balancing stresses in more than one direction, an adhesive material having reinforcement materials therein, a temporary adhesive material, a chemical vapor deposition material, and a physical vapor deposition material.
2. (Previously Presented) The semiconductor die in accordance with claim 1, wherein the stress-balancing layer comprises one of a single component layer, a substantially homogeneous mixture of a strong material in a matrix material, a heterogeneous composite of particles of a strong material in a matrix material, and a tape with rigidity in the X-Y plane.
3. (Canceled)
4. (Previously Presented) The semiconductor die in accordance with claim 1, wherein the stress-balancing layer comprises a layer for laser-marking.

5. (Previously Presented) The semiconductor die in accordance with claim 1, further comprising an adhesive layer attached to the stress-balancing layer.

6. (Previously Presented) The semiconductor die in accordance with claim 5, wherein the adhesive layer comprises a layer of material for laser-marking.

7. (Previously Presented) A nonwarp semiconductor die, comprising:
a semiconductor substrate having a front side, a back side, and a low ratio of height to a horizontal dimension;
an integrated circuit on the front side;
a passivation layer covering a portion of the integrated circuit exerting a stress on the front side;
and
a stress-balancing layer covering at least a portion of the back side, the stress-balancing layer for balancing a portion of the front side stress with a generally equivalent back side stress, the stress-balancing layer comprising at least one of a metal, a metal alloy, a metallorganic material, a photoresist material, a multilayer material for balancing stresses in more than one direction, a tape material for balancing stresses in more than one direction, an adhesive material having reinforcement materials therein, a temporary adhesive material, a chemical vapor deposition material, and a physical vapor deposition material.

8. (Previously Presented) The nonwarp semiconductor die in accordance with claim 7, wherein the stress-balancing layer comprises one of a single component layer, a substantially homogeneous mixture of a strong material in a matrix material, a heterogeneous composite of particles of a strong material in a matrix material, and a tape with rigidity in the X-Y plane.

9. (Canceled)

10. (Previously Presented) The nonwarp semiconductor die in accordance with claim 9, wherein the stress-balancing layer comprises a layer of material for laser-marking.

11. (Previously Presented) The nonwarp semiconductor die in accordance with claim 7, further comprising an adhesive layer attached to the stress-balancing layer.

12. (Previously Presented) The nonwarp semiconductor die in accordance with claim 11, wherein the adhesive layer comprises a layer of material for laser-marking.

13. (Previously Presented) A semiconductor die, comprising:
a semiconductor substrate having a front side having an integrated circuit on a portion thereof and a back side;
a passivation layer covering a portion of the integrated circuit causing a stress on at least a portion of the semiconductor substrate; and
a stress-balancing layer covering at least a portion of the back side substantially balancing the stress caused by the passivation layer covering a portion of the integrated circuit, the stress-balancing layer comprising at least one of a metal, a metal alloy, a metallorganic material, a photoresist material, a multilayer material for balancing stresses in more than one direction, a tape material for balancing stresses in more than one direction, an adhesive material having reinforcement materials therein, a temporary adhesive material, a chemical vapor deposition material, and a physical vapor deposition material.

14. (Previously Presented) The semiconductor die of claim 13, wherein the stress-balancing layer comprises one of a single component layer, a substantially homogeneous mixture of a strong material in a matrix material, a heterogeneous composite of particles of a strong material in a matrix material, and a tape with rigidity in the X-Y plane.

15. (Canceled)

16. (Previously Presented) The semiconductor die of claim 13, wherein the stress-balancing layer comprises a layer for laser-marking.
17. (Previously Presented) The semiconductor die of claim 13, further comprising an adhesive layer attached to the stress-balancing layer.
18. (Previously Presented) The semiconductor die of claim 17, wherein the adhesive layer comprises a layer of material for laser-marking.
19. (Previously Presented) A reduced stress semiconductor die, comprising:
a semiconductor substrate having a front side, a back side, and a low ratio of the height of the semiconductor substrate to a horizontal dimension of the semiconductor substrate;
an integrated circuit on the front side of the semiconductor substrate;
a passivation layer covering a portion of the integrated circuit causing a force acting on a portion of the front side; and
a force-balancing layer covering at least a portion of the back side, the force-balancing layer for balancing a portion of the force on the front side, the force-balancing layer comprising at least one of a metal, a metal alloy, a metallorganic material, a photoresist material, a multilayer material for balancing stresses in more than one direction, a tape material for balancing stresses in more than one direction, an adhesive material having reinforcement materials therein, a temporary adhesive material, a chemical vapor deposition material, and a physical vapor deposition material.
20. (Previously Presented) The semiconductor die of claim 19, wherein the force-balancing layer comprises one of a single component layer, a substantially homogeneous mixture of a strong material in a matrix material, a heterogeneous composite of particles of a strong material in a matrix material, and a tape with rigidity in the X-Y plane.
21. (Canceled)

22. (Previously Presented) The semiconductor die of claim 21, wherein the stress-balancing layer comprises a layer of material for laser-marking.

23. (Previously Presented) The semiconductor die of claim 19, further comprising an adhesive layer attached to the stress-balancing layer.

24. (Previously Presented) The semiconductor die of claim 23, wherein the adhesive layer comprises a layer of material for laser-marking.